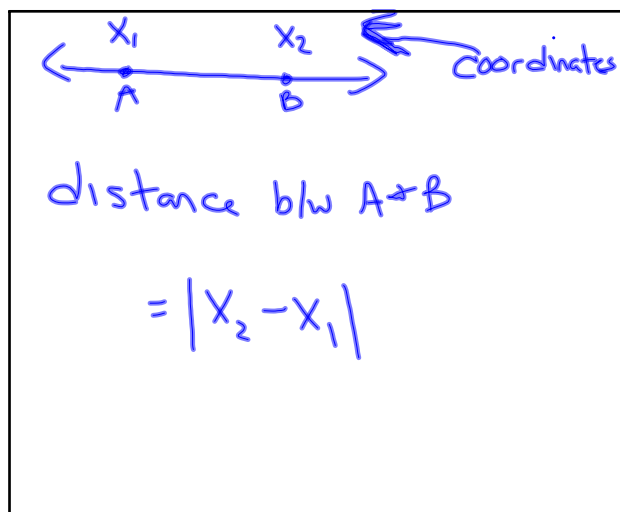


1.2 Use Segments and Congruence

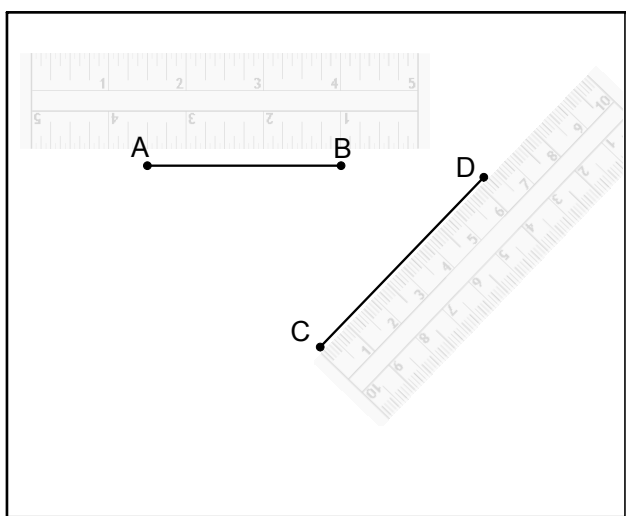
postulate or axiom-a rule that is accepted without proof

Postulate 1--Ruler Postulate--the points on a line can be matched one-to-one with the real numbers.

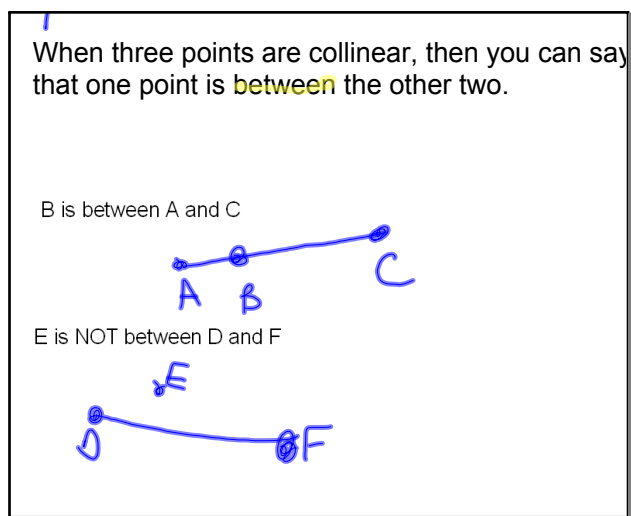


Sep 17-7:21 AM

Sep 10-8:43 AM

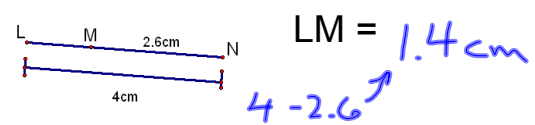


Sep 17-7:25 AM

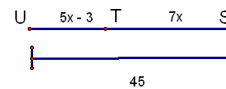


Sep 17-7:22 AM

Postulate 2--The Segment Addition Postulate--If B is between A and C, then $AB + BC = AC$.
If $AB + BC = AC$, then B is between A and C.



Find ST if T is between U and S and
 $UT = 5x - 3$ and $ST = 7x$



$$5x - 3 + 7x = 45$$

$$12x - 3 = 45$$

$$12x = 48$$

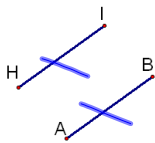
$$x = 4$$

$$ST = 28 \text{ units}$$

Jun 20-7:27 AM

Sep 16-9:48 AM

Congruent Segments--segments that have the same length

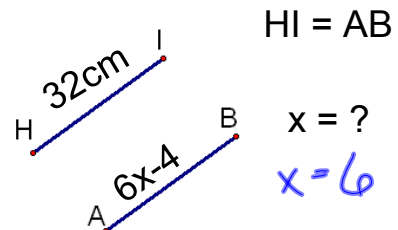


lengths are =

$$HI = AB$$

segments are \cong

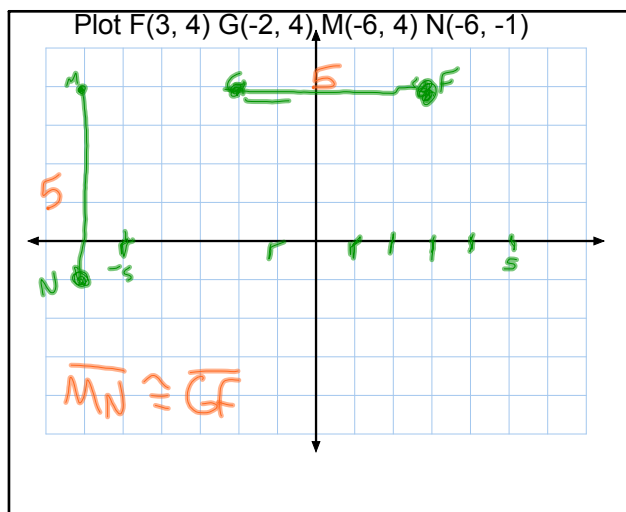
$$\overline{HI} \cong \overline{AB}$$



$$6x - 4 = 32$$

Sep 17-7:23 AM

Sep 16-9:54 AM



Jun 20-7:35 AM

Decide whether the statement is **true** or **false**.

- \overleftrightarrow{BD} and \overleftrightarrow{DC} intersect at point D .
- \overleftrightarrow{AB} and \overleftrightarrow{BD} intersect at point A .
- \overleftrightarrow{BD} intersects plane M at point B .
- \overleftrightarrow{AB} and \overleftrightarrow{DC} do not appear to intersect.
- \overleftrightarrow{BD} is the intersection of planes M and N .

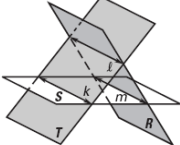
Naming Intersections of Lines In Exercises 10–15, use the diagram at the right.

- Name the intersection of \overleftrightarrow{PQ} and \overleftrightarrow{TS} .
- Name the intersection of \overleftrightarrow{QS} and \overleftrightarrow{PT} .
- Name the intersection of \overleftrightarrow{SQ} and \overleftrightarrow{TR} .
- Name the intersection of \overleftrightarrow{RS} and \overleftrightarrow{PT} .
- Name the intersection of \overleftrightarrow{RP} and \overleftrightarrow{PT} .
- Name the intersection of \overleftrightarrow{RS} and \overleftrightarrow{ST} .

Sep 15-9:52 AM

Use the diagram at the right.

5. Name the intersection of planes S and T .
6. Name the intersection of planes T and R .
7. Name the intersection of planes R and S .



Sep 15-9:56 AM

For use after Lesson 1.3, pages 14–20

Use the diagram at the right.

1. Name the points on plane S .
2. Name two lines.
3. Name the plane that contains point D .
4. Name three collinear points.
5. Decide whether the following statement is *true* or *false*.
Points K , F , and D are coplanar.

The diagram shows two planes, S and W , intersecting along a line. Plane S is represented by a rectangle, and plane W is represented by a parallelogram. The intersection line contains points P , F , and Q . Point K is on plane S above the intersection line, and point D is on plane S below the intersection line. A blue line segment connects K and D , passing through F . Another blue line segment is on plane W , passing through P and Q . Labels a , b , and s are also present near the planes.

Sep 15-7:20 AM

HW
p12-13
#s 6-11,13,14,27-30

Jun 20-7:42 AM